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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,876	07/03/2003	Frank Kelly	115426-834	6297
29158	7590	11/28/2006		EXAMINER ZEWDU, MELESS NMN
BELL, BOYD & LLOYD LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			ART UNIT 2617	PAPER NUMBER

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/613,876	KELLY ET AL.	
	Examiner	Art Unit	
	Meless N. Zewdu	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,3-8,10-14 and 16-25 is/are rejected.
- 7) Claim(s) 2,9 and 15 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 03 July 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

1. This action is the first on the merit of the instant application.
2. Claims 1-25 are pending in this action.

Claim Objections

Claims 7, 21, 23, and 25 are objected to because of the following informalities: these claims appear dependent claims, but they in fact are configured in independent form. For all examination related practical purposes, the claims are treated as they are independent claims. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 recites the limitation "the step of further allocating" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-25 are rejected on the ground of nonstatutory double patenting over claims 1-24 of U. S. Patent No. 6,987,741 B2 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: the difference between the claims in the patent and the claims in the instant application is that the claims in the instant application are broader than the claims in the patent; other difference is phrasings (for example receiving and detecting) which are similar and inherent in to a communication system.

Claims 1-25 are rejected on the ground of nonstatutory double patenting over claims 1-32 of U. S. Patent No. 6,650,869 B2 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: the difference between the claims in the patent and the claims in the instant application is that the claims in the instant application are broader than the claims in the patent; other difference is phrasings (for example receiving and detecting) which are similar and inherent in to a communication system

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosati (US 6,041,233) in view of Jones (US 6,631,118 B1)..

As per claim 8: Rosati discloses a system for managing bandwidth (see figs. 3 and 4, element 20; col. 3, lines 8-15), in a data network (see col. 6, lines 8-17), the system comprising:

a relay (satellite) station configured to support transmission of data over a communication channel (see figs. 3 and 4; col. 6, lines 8-17); and a hub configured to allocate capacity on the communication channel for a terminal to transmit the data over the communication channel (see abstract; col. 4, lines 54-67), wherein, in anticipation of the terminal having to transmit additional data, the hub further allocates additional capacity on the communication channel for the terminal (see col. 4, lines 54-67). Examiner considers the demand-net operation center (DOC) as a hub. But, Rosati does not explicitly teach about a method wherein the anticipatory allocation is being determined according to loading of the network, as claimed by applicant. However, in the same field of endeavor, Jones teaches about providing dynamic bandwidth on demand wherein the amount of bandwidth provided determined

based on monitoring the bandwidth usage of all the clients connected to all switches that are attach to the network – hence monitoring the load in the network (see col. 5, lines 9-21). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Rosati with that of Jones for the advantage of achieving relatively efficient bandwidth management (see col. 5, lines 13-16).

As per claim 7: the feature of claim 7 is directed to a computer readable medium for managing bandwidth in a data network, by executing the steps of claim 1. However, since the steps of claim 1 are shown to have been performed, as discussed in the rejection of claim 1 above, the computer readable medium of claim 7 should be an obvious feature of the prior art. Hence, claim 7 is rejected on the same ground and motivation as claim 1.

As per claim 1: the features of claim 1 are similar to the feature of claim 8, except claim 8 is directed to a system for performing the steps of the method claim 1, and further include a relay/satellite station configured to support transmission of data over a communication channel, which is taught by Rosati (see fig. 3, element 12). Hence, since the difference feature is taught and the method of claim 1 is required by the corresponding system of claim 8, claim 1 is rejected on the same ground and motivation as claim 8.

As per claim 3: Williams teaches a method, wherein the step of further allocating is performed for a predetermined period after the initial allocation (see col. 3, lines 5-11).

When the references are combined as shown above, the method will include -- selectively adjusting the predetermined period based on the load.

As per claim 4: the features of claim 1 are similar to the features of claims 1 and 8, except limiting the anticipatory allocations to a predetermined level based on availability, which is taught by Rosati (see col. 4, lines 3244). Hence, claim 4 is rejected on the same ground and motivation as claims 1 and 8.

As per claim 5: the features of claim 5 are similar to the features of claim 4, except capacity across the groupd of communication channels, which is taught by Rosati 9see col. 4, lines 32-67; claim 1).

As per claim 6: Rosati teaches a method, wherein the data network includes a satellite for supporting two-way communication between the terminal and a hub, and the terminal is a very small aperture terminal (VSAT), the communication channel being based on time division multiple access (TDMA) (see col. 3, lines 16-29).

As per claim 10: the feature of claim 10 is similar to the feature of claim 3. Hence, claim 10 is rejected on the same ground and motivation as claim 3.

As per claim 11: the features of claim 11 are similar to the features of claim 4. Hence, claim 11 is rejected on the same ground and motivation as claim 4.

As per claim 12: the feature of claim 12 is similar to the feature of claim 5. Hence, claim 12 is rejected on then same ground and motivation as claim 5.

As per claim 13: the feature of claim 13 is similar to the feature of claim 6. Hence, claim 13 is rejected on the same ground and motivation as claim 6.

As per claim 14: the features of claim 14 are similar to the features of claim 8, except claim 14 is directed to an apparatus and claim 8 is directed to a system, the difference of which carries no patentable weight since both are intended to perform similar functions. Hence, claim 14 is rejected on the same ground and motivation as claim 8.

As per claim 16: the feature of claim 16 is similar to the feature of claim 3. Hence, claim 16 is rejected on the same ground and motivation as claim 3.

As per claim 17: the feature of claim 17 is similar to the feature of claim 4. Hence, claim 17 is rejected on the same ground and motivation as claim 4.

As per claim 18: the feature of claim 18 is similar to the feature of claim 5. Hence, claim 18 is rejected on the same ground and motivation as claim 5.

As per claim 19: the feature of claim 19 is similar to the feature of claim 6. Hence, claim 19 is rejected on the same ground and motivation as claim 6.

As per claim 20: the features of claim 20 are similar to the features of claim 8, except detecting an active terminal in the communication system, which is taught by Rosati (see abstract). Locating/detecting a set of user terminals in a coverage area includes a one terminal. Furthermore, Rosati also teaches bandwidth allocation based on the size of the bandwidth allocations (see col. 4, lines 32-67), hence, satisfying the one of the conditions for allocation. Hence, claim 20 is rejected on the same ground and motivation as claim 8.

As per claim 21: the feature of claim 21 is directed to a computer readable medium for managing bandwidth in a data network, by executing the steps of claim 20. However, since the steps of claim 20 are shown to have been performed, as discussed in the

rejection of claim 20 above, the computer readable medium of claim 21 should be an obvious feature of the prior art. Hence, claim 21 is rejected on the same ground and motivation as claim 20.

Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosati in views of Black et al. (Black) and (US 6,208,873 B1) and Williams (US 5,745,836).

As per claim 22: a method for ranging in a two-way radio communication system including a plurality of terminals (abstract; col. 6, lines 8-17), the method comprising:

allocating capacity on channel for transporting signals from the terminals (see abstract; col. 3, lines 8-15, 48-54; col. 4, lines 32-67; col. 5, line 17-50);

monitoring the allocation of the capacity and selectively/variably adjusting the capacity based upon the allocation of the capacity and loading of the system (see abstract; col. 4, lines 32-67). Note: the phrase "the collective bandwidth requirement" indicates monitoring is inherent. But, Rosati does not explicitly teach about transmitting a command to each of the terminals concurrently to enter/support a ranging mode for adjusting at least one of power and timing of the terminals, as claimed by applicant.

However, in the same field of endeavor, Black teaches about reverse link power control, wherein a plurality of power control channels are simultaneously transmitter to mobile units from a base station (see col. 5, lines 34-49). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Rosati with that of Black so as to determine whether to have a mobile station increase or decrease its transmit power (see col. 1, lines 17-36). But, Rosati in

vie of Black doe not explicitly teach about a contention channel and ranging, as claimed by applicant. However, in the same field of endeavor, Williams teaches about undesirable energy suppression system in a contention based communication system, wherein a contention channel is used applying a ranging technique (see col. 2, line 65-col. 3, line 23; col. 19, lines 6-31). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention s made to further modify the above references with the teaching of Williams for the advantage of correcting time delays associated with remote units/points.

As per claim 23: the feature of claim 23 is directed to a computer-readable medium for performing the steps of claim 22. Because the prior art of record discloses/teaches the steps of claim 22, the computer-readable medium of claim 23 should be obvious. Hence, claim 23 is rejected on the same ground and motivation as claim 22.

Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosati in view of Williams (US 5,745,836).

As per claim 24: some of the features of claim 24 are similar to the features of claim 8 and hence rejected therewith, except allocating a number of slots on a contention channel and adjusting the contention channel which is taught by Willams (see col. 2, line 58-col. 3, line 23). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Rosati with that of Willams for the advantage of maintaining a consistent quality of service for the entire network (see 3, lines 16-19).

As per claim 25: the feature of claim 25 is directed to a computer-readable medium for performing the steps of claim 24. Because the prior art of record discloses/teaches the steps of claim 24, the computer-readable medium of claim 25 should be obvious. Hence, claim 25 is rejected on the same ground and motivation as claim 25.

Allowable Subject Matter

Claims 2, 9 and 15 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meless N. Zewdu whose telephone number is (571) 272-7873. The examiner can normally be reached on 8:30 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Banks-Harold Marsha can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

Meless Zewdu



Examiner

22 November 2006.